

Abstract**Methods and Systems for the Annotation of Biomolecule Patterns in a Chromatography/Mass-Spectrometry Analysis**

The method and measurement system according to the invention performs combined
5 Chromatography and Mass Spectrometry analysis and comprises the steps of:
performing an C/MS analysis 300; generating at least one first elution profile 305,
wherein one dimension is an elution time of the chromatography, and one dimension is
mass to charge ratio (m/z), and at least one dimension a signal intensity, and the signal
from each biomolecule species is dispersed forming a plurality of signal peaks
10 associated with each biomolecule species in the elution profile; and reassembling 310
the dispersed signal originating from one biomolecule species in the elution profile. The
reassembling comprises an automated annotation adapted to reassemble signal
variations in the elution profile that originate from the same biomolecule species and
generating a biomolecule map. The automated annotating is simultaneously based on
15 both the elution time-dimension and the m/z -dimension.